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THE PHILOSOPHICAL AND SOCIAL
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AMERICAN EDUCATIONAL RESEARCH ASSOCIATION

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Vol. XXV, No. 1

February 1955

The Philosophical and Social Framework of Education

Reviews the literature for the three-year period since the issuance of
Vol. XXII, No. 1, February 1952

TABLE OF CONTENTS

Chapter	Page
Introduction	4
I. Historical and Philosophical Aspects of Education	5
FREDERICK E. ELLIS, <i>University of Minnesota, Minneapolis, Minnesota</i>	
II. Philosophy of the Behavioral Sciences	13
RICHARD D. MOSIER, <i>University of California, Berkeley, California</i>	
III. Social Dividends of Education	25
MILOSH MUNTYAN, <i>Michigan State College, East Lansing, Michigan</i>	
CAROL LUTEY, <i>Michigan State College, East Lansing, Michigan</i>	
IV. Social Influences on Children and Youth	36
EVELYN I. BANNING, <i>Wheaton College, Norton, Massachusetts</i>	
V. The School and Community Forces	48
VYNCE A. HINES, <i>University of Florida, Gainesville, Florida</i>	
ROBERT L. CURRAN, <i>University of Florida, Gainesville, Florida</i>	
VI. The Wider Social Context of Education	61
ARCH D. LANG, <i>San Francisco State College, San Francisco, California</i>	
ROBERT R. SMITH, <i>San Francisco State College, San Francisco, California</i>	
Index	71
	1

This issue of the REVIEW was prepared by the Committee on the
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INTRODUCTION

THE literature on the philosophical and social framework of education falls into two categories: philosophical and historical studies, and sociological and cultural studies. The first of these categories ordinarily includes all the investigations of such broad questions as the relation of educational ideas and practices to notions of the nature of knowledge, morals, and reality. It also includes investigations of past educational theories and practices. In recent years much attention has been given to the linguistic and logical aspects of the sciences, beginning with the physical sciences and extending into the psychological and social sciences. Explorations of these phases of science have brought fresh insight into some of the methodological problems, particularly in the behavioral sciences. Most of these explorations have been carried on by persons interested in the philosophical problems of logic and language and by a few theoretical psychologists. Nevertheless, many of these studies bear directly on certain methodological problems of educational research. For this reason the most relevant studies have been included in the REVIEW for the first time.

The second category—sociological and cultural studies—consists of investigations which depend primarily upon the procedures of counting and measuring. Here the perennial topics have been taken as the points about which to organize the literature: the social forces affecting the school, the teachers and administrators, and the child; the structure of social relations in the community; and the social effects of the school. The literature on the family has not been treated in a separate chapter as has been done in previous years. Since this topic received attention in other numbers of the REVIEW, the treatment of it has been restricted to a part of Chapter IV. For the same reason the topic of group structure and process has been omitted entirely.

The general plan of this number was worked out by the Committee, but the burden of preparing this issue fell almost entirely upon those who wrote the chapters. To them the Committee is deeply indebted, and especially so, since the major part of the work had to be done in the summer months which are normally packed with summer school duties and haunted by thoughts of vacation.

B. OTHANEL SMITH, *Chairman*
Committee on Philosophical and
Social Framework of Education

CHAPTER I

Historical and Philosophical Aspects of Education

FREDERICK E. ELLIS

TO THE task of selecting, evaluating, and interpreting current research in the historical and philosophical aspects of education one inevitably brings a high degree of arbitrariness. Any selection is to some extent arbitrary. The number of sources mentioned could be doubled. No doubt some excellent material has been omitted which might well have been included, but limits of space and personal judgment make errors of commission and omission unavoidable. Only material of superior value is included in the present compilation. In other words, the works open up questions of broad philosophic or social interest and are written with some sense of literary style. In certain instances publications are listed in order to illustrate the type of research and writing which is typical of a given area and which points out the need for more rigorous attack.

The quality of published material in history and philosophy of education, or in areas directly related to it, ranges from one end of the continuum to the other—from production of a high order at one extreme to educational hack writing at the other. Intended triumph frequently falls to mere flatness.

The volume of writing which has been done in these fields attests to a growing interest in their data and their objectives as well as to the need for pursuing useful research in them. It is impossible, of course, to write imaginatively or absorbingly unless one has undergone unusual experiences and has carefully reflected upon them. Some authors, particularly in education, appear to be more interested in doing than in thinking, and their writing manifests a striking lack of what someone has called "measured meditation."

Education is not a discipline which needs to concern itself only with the finished products of man's culture. On the contrary, it is tightly bound up with the ebb and flow, the tension and conflict which mark the political, the economic, the religious, and the esthetic world in which it operates and thru which its character is largely determined. The need for perspective and direction in such a critical area as education is plainly evident and to this end the discipline of history and philosophy of education can make increasingly significant contributions. One must add, however, that rigorous and scholarly research of high excellence in the discipline is conspicuously lacking; it seems to the present reviewer that tireless repetition, desiccated writing, and intellectual exhaustion characterize much so-called research in the field. There is great assiduity in accumulating knowledge about things educational, but a disconcerting lack of systematic, integrating theory which would give meaning and significance to our efforts. Special pleading for "education for change" or "education for democracy" is

insufficient. In and of themselves our educational data explain or help us to understand nothing. The accumulated data must be ordered in terms of systematic theory. The fragmentary and rag-bag character of a good deal of current educational research indicates slight evidence of the construction of such a theoretical framework.

It is within the scope of this chapter to include titles in the fields of philosophy, political thought, and religion—fields broadly contiguous to education and from which education derives its method and interpretive technics.

Philosophy

A synoptic and competently fashioned critique in the field of values was made by Perry (53). The perennial problems in philosophy of education almost axiomatically have their roots in the thinking of Plato. Two excellent studies recently appeared. Levinson (39) published a judicious and finely turned discussion of Plato with respect to his alleged support of authoritarianism in politics. Wild (71) considered the problem from the standpoint of natural law. Both books have much material relevant to the presuppositions of education in a democratic society. Anshen (3) edited a collection of essays on the moral bases for action. Several of these essays have particular relevance to the general field of philosophy of education.

The problem of freedom—the most important and urgent problem in the world today—was treated by Bryson and others (14). Conant (21) presented a forthright statement of the role of the school in modern democracy, stressing the school's function in the maintenance and extension of freedom. A splendid collection of essays by Taylor (65) treated the same theme. Hullfish (35) edited a superior yearbook on the problem of educational freedom in a period of tension and conflict. To this book David Spitz contributed an unforgettable article on the subtle interplay between power, law, and the freedom to inquire.

History and Philosophy of Education

The appearance of books, including texts, in history and philosophy of education has proceeded at a fairly rapid pace. Sayers (57) produced an elementary text in philosophy of education. Fitzpatrick (29) wrote on the philosophy of education from an avowedly non-naturalistic point of view. Broudy (12) examined some of the major problems of education against their philosophical background in a well-written and thoro introduction. His position as a classical realist shines thru the pages of the book and is easily identified. Butts and Cremin (17) treated the history of American education as a major aspect of cultural growth. The authors belabor the development of the historical background of American culture and reiterate considerable data already well known, but in the main they

produced a first-rate, solid text. Curtis and Boulton (23) concerned themselves with the history of educational ideas. One suspects that the authors might have done better by endeavoring to do less. Knight (38) was perceptively critical of the process of accretion by which much of the development of the American public school has come about. Cole (20) produced a survey-type history of education, omitting—strangely enough—any reference to either Horace Mann or John Dewey. Ambler (1) wrote a heavily detailed, almost Gargantuan, history of education in West Virginia. Cloud (19) traced the emergence and development of education in California. Brubacher (13) added his bit to the rising tide of “readings.” Melby and Piner (44) brought out a useful collection of readings on freedom and public education. There is much solid history, written with discrimination, in Monroe’s history of teaching-learning theory and teacher education (45). Counts (22) replayed a familiar and well-known tune, altho one which is valuable enough to warrant repetition.

Stanley (61) examined with unusual competence the tasks and functions of the public schools against the substructure of American life. He sought to answer two crucial questions: What are the forces behind the confusion and conflict about American public education? In what manner can professional educators deal with these conflicts and ambivalences? Rugg (56) challenged educators to rebuild the psychological, esthetic, and social foundations of education and to break with an essentially conformist tradition.

Macdonald (43) sketched what might be regarded as an introductory statement of Canadian philosophy of education. The spirit of the book is essentially conservative. The absence of educational jargon and cliché blew upon this reviewer as a refreshing breeze. Sullivan (64) analyzed the concept of authority in modern educational thinking.

Religion and American Public Education

The problem of religion in American public education continues to occupy the thinking of educators and sectarian religious apologists. Those who press for the admission of religion to the curriculum persistently are unable to define or to spell out precisely what they have in mind, tho frequent and tireless protestation is made that religion shall be of a non-sectarian variety. The problem is further complicated and obscured by the unwillingness of apologists for formal religious points of view to grant validity to nontheistic definitions of the word *religion*. Apparently a generous conception of religion is difficult to come by.

Bower (11) proposed a variety of nonsectarian religion which would at once be offensive to those, say, of the Roman Catholic communion if it were introduced to the public schools. The Committee on Religion and Education of the American Council on Education (2) declared: “We believe the findings of this inquiry point to factual study of religion as the best solution confronting public education in dealing with religion.”

A veritable hornet's nest of unsolved problems and unresolved terminology lies hidden beneath these words. As yet no one has succeeded in throwing a bridge across the chasm which separates the public-school classroom from the sectarian pulpit. In an earlier document the Educational Policies Commission (50) stated without equivocation that the public school should teach about religion. Again, the report failed to state in what manner the bell is to be put on the cat! Are these writers the dauntless soldiers of a forlorn hope?

In a particularly significant study Espy (27) found that the faculties in church-related colleges did not seem to know how to deal with the data of their religious loyalties in terms of the classroom. Fairchild and others (28) wrote a series of essays on religion and the several academic disciplines at the college level. An attempt to synthesize the common elements of Catholicism, Judaism, and Protestantism for use in the public schools was made by Hay (31). Like much of the literature on this topic, the book is overly hortatory and deals only slightly with the actual problems either of creating the synthesis or of teaching it. A similar approach was made by Gaebelein (30). Other studies with religion and education as the point of focus were those of Berkson (8), Johnson (36), Niebuhr (51), Ulrich (68), and Van Dusen (69). Loughery (41) was concerned with the legal rights of parents as defined in educational law.

The National Catholic Welfare Conference (49) presented the position on social, educational, and political problems of the hierarchy of the Roman Catholic Church in the United States. The official documents—at times meandering and discursive—are replete with references to education both public and parochial. The shift in attitude toward the American public schools by the hierarchy may be discerned in the sections dealing with education in the books by Ellis (26) and Moynihan (47). The latter is heavily documented but lacks the marks of critical scholarship; the former is long, elaborate, and rhapsodical. Montay (46) wrote a history of Catholic secondary education in Chicago.

A definitive and skilful presentation of the legal aspects of separation of church and state, with a valuable treatment of the concomitant problems of public education was made by Pfeffer (54). He drives home the point that freedom of religion is impossible without separation of church and state. Dawson (24) wrote briefly about the major sources of irritation between church and state. Sugrue (63), a Roman Catholic layman, presented a candid discussion of the status of the doctrine of separation in his own denomination. With respect to this topic one must not overlook a stimulating exchange of articles by Murray (48) and Shea (58).

Modern Education under Fire

Opposition to the philosophy of modern education was voiced in a number of publications. Hutchins (33, 34) bitterly assailed it. Chalmers (18) asserted that American education has suffered from the deleterious

effects of what he termed "disintegrated liberalism" and that it has become preoccupied with the trivial and the unimportant. John Dewey and his followers are the guilty ones!

Books hotly attacking the philosophy and the accomplishments of the public schools occupy a formidable amount of shelf space in any library. Stout (62) compiled the most nearly complete bibliography on this subject to date.

Advocating a return to nineteenth century concepts of education, Bestor (9) fashioned American public education in the image of a straw man and ignited it with éclat. Woodring (72) with amazing lack of objectivity tried to "talk sense" about the public schools. His conclusions have a curious way of going far beyond the evidence. Lynd (42) in angrily formed prejudices joined the importunate and shrill chorus of those who bleat about the public schools. The technics of serious, painstaking scholarship are not featured in these publications. As a matter of fact, excellent, critical studies of the achievements of the public schools are singularly scarce. Both Hook (32) and Thayer (66) met the challenge of the educational jeremiads in brief, telling essays.

Periodical Literature

After examining much of the periodical literature in history and philosophy of education, the present writer doubts—perhaps satirically—that the quality of writing has kept pace with the velocity of its publication. Among the outstanding articles was one by Shuster (59) who wrote with rare felicity of the weak spots in American education. Smith (60) provided solid reading on the improvement of critical thinking, a problem close to the heart of the educator. Berkson (5) with a clear pen pointed to the need for squaring the objectives of the progressive education movement with the limitations of the situation, that is, with reality.

Kandel (37) contributed three splendid essays on education and international understanding. Burton (15), an astute realist, wrote honestly and courageously on the problem of meeting the attacks on public education. Thayer (67), long a spokesman for complete separation of church and state, particularly as that principle is relevant to the public school, met the problem of sectarian attacks upon public education head on. Raup (55) clarified the differences between the moral dimension of human experience and the religious aspect. A further attempt to explore the meaning of the terms *moral* and *spiritual* was made by Parsons (52). Ellis (25) pointed out the implications for democratic freedom of the encyclical *Libertas Praestantissimum* of Pope Leo XIII.

Benne (4) wrote delightfully and with sharp insight on the intimations of education for freedom in our painful century. With characteristic intrepidity Butts (16) discussed the perennial responsibility of education in maintaining and extending freedom.

The implications of the philosophy of Charles Sanders Peirce for American education is a neglected area of study. Levy (40) initiated inquiry in this field with a brief essay. By far the ablest of the many articles which have recently appeared on John Dewey are those of Berkson (6, 7). Berkson writes with geniality and ease.

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CHAPTER II

Philosophy of the Behavioral Sciences

RICHARD D. MOSIER

THIS chapter deals with certain logical and methodological problems of theory construction in the behavioral sciences. In matters of theory construction, the social sciences, which study "action," have problems in common with the physical sciences, which study "motion." The study of these common problems of theory construction is generally regarded as the study of the language of science. The general characteristics of the act of inquiry confer upon the language of science some special features. Scientific theory aims at a type of explanation which seeks to establish functional relationships between variables. Observations are made within a theoretical framework, and this framework yields empirical implications which can be tested by further observations. The language of science is tied together by symbolic constructs of varying degrees of remoteness or abstraction from direct observations and empirical data, and the logical form of the scientific proposition is an integral part of the expression of empirical laws. Hence it is impossible to separate the purely empirical from the purely rational or theoretical components of scientific inquiry. The concepts and propositions of a scientific system must be represented, manipulated, and communicated symbolically, and the scientific protocol is not, therefore, free from the rules of symbolism. The verbal statements, mathematical expressions, and logical propositions which are generated in the act of inquiry constitute the linguistic or symbolic behavior of the scientist, and, in sum, the language of science.

The Language of Science

The language of science undergoes continuous refinement and reconstruction thru an operational analysis and criticism of the symbolic behavior of the scientist. Reichenbach (98) pointed out that the common bond uniting philosophers participating in the philosophy of science movement is the fusion of the empiricist conceptions of modern science with the rationalistic or formalistic conceptions of modern logic. The resulting point of view is sometimes called "logical positivism," tho more frequently it is referred to as "logical empiricism" or "scientific empiricism." Morris (84) described this point of view. Reichenbach (99) traced scientific empiricism and logical positivism to the philosophies of Berkeley, Hume, and Kant. Blumberg and Feigl (12) argued that the characteristic theme of logical positivism is that science seeks to generate confirmable propositions by relating a formal system of symbols and constructs to empirical observations and operations. Feigl (41) argued that the formal propositions of science gain empirical significance when their truth can be demon-

strated by a set of concrete operations. Kantor (62) demonstrated how the logic of modern science reflects the influence not only of logical positivism but also of operationism and behaviorism.

European positivism and American pragmatism have contributed to the development of scientific empiricism and operationism, and to the philosophy of science movement, which seeks to develop a uniform language of science and to generate a common body of logical and methodological principles to which all the sciences may one day subscribe. Frank (45) argued that the gap between philosophy and science is artificial, and that both science and philosophy should adopt the attitude of the logical empiricists, excluding all postulates not susceptible to operational and empirical validation. Kantor (63) showed how the logic of science enables us to avoid traditional epistemological puzzles. Hockett (54) demonstrated that the "unity of science" implies not merely methodological unity but general acceptance of the reduction principle. Ayer (5) reduced science to "sense contents," while maintaining that science rests on "immediate" experience. Neurath (86) defined the doctrine of "physicalism," which requires the reduction of the language of science by a chain of reduction sentences to the language of physics. In its earliest formulations logical empiricism was inclined to reduce all propositions either to their "pure" rational form or to their "pure" empirical content. However, Quine (94) showed that neither reduction is necessary, and that analytic propositions grounded in "meaning" and synthetic propositions grounded in "fact" do not involve a necessary reduction to immediate experience. Lloyd (74) argued that scientific language need not be limited to empirical constructs.

The Logic of Experience

After the migration of the positivists from Europe to America, there was a gradual fusion of European positivism and American pragmatism, which resulted in the more recent doctrines of scientific empiricism and operationism. The beginnings of operationism have been attributed to Bridgman (15), whose work on the methodological problems of modern physics was animated by the principle that the meaning of a concept is nothing more than a set of operations; he (15, 17) argued that the scientific concept is synonymous with the corresponding set of operations. In extending and confirming his adoption of the operationist principle, Bridgman (16, 18) reduced the language of physics to "my private experience." Objection has been taken to such extreme empiricist principles on the grounds that science is public and "intersubjective," requiring the confirmation of the findings of one set of private experiences with those of another set. Bergmann (8) demonstrated that operationism need not be dogmatic in these epistemological and ontological matters. Kantor (61) analyzed the "intersubjective" and "interbehavioral" nature of scientific propositions. Israel (57) and Israel and Goldstein (58) showed that operationism has not only methodological but also existential problems. The "subjectivism"

generated by the interpretation put upon the operationist principle in the physical sciences has been overcome by the "objectivism" developing from its application in the social sciences. The field theory of Lewin (71), the social behaviorism of Mead (82), the semiotic of Morris (83, 85), and, above all, the pragmatic tradition in America, have all been factors in preventing operationism from taking an ultrapositivist form.

Operationism has spread to the behavioral sciences, in particular to psychology, where it has fused with behaviorism. As a result of these later developments, operationism now appears as behavioristic criticism whose criteria determine not merely the operational validity but the empirical meaning of scientific concepts. Marx (81) assembled the relevant literature on the relation of operationism to theory construction in psychology. The work of Bergmann (6, 7, 8, 9), Bergmann and Spence (10, 11), Brunswik (22, 23, 24, 25), Marx (80, 81), Pratt, (91, 92), Spence (102, 103), and Stevens (107, 108, 109), is representative of operationism and scientific empiricism in psychology. Boring (13, 14), Ellson (37), Israel (57), Israel and Goldstein (58), Kantor (61, 63), Katsoff (66), Katsoff and Thibaut (67), Newbury (87), Prentice (93), Skinner (101), Tolman (111, 112, 113), and Tolman and Brunswik (114) extended and enriched the meaning of operational analysis and criticism in the behavioral sciences.

Operationism has been criticized, however, for its handling of the problem of generality. The generalizing function of science involves the notion of class, so that all objects and events satisfying certain criteria are called members of a class. Thus, logical criteria determining the inclusion or exclusion of a particular event in a class of events are involved in the organization and observation of all empirical data. There is, therefore, some element of generality in the most elementary and restricted of empirical propositions. The question of whether there was a basis for operational criteria of class formation soon arose. Stevens (109) argued that classifications reduce to elementary discriminations, and that it is on the basis of such elementary discriminations that we form our rudimentary classes. Tolman (112) maintained that the problem of immediate experience should be left to the philosophers, while for psychological purposes the given could be taken for granted. Somerville (105) reasoned that the tendency of logical empiricism to reduce science to sense-contents leaves the problem of causality in the social sciences unsettled. Johnson (60) argued that pre-experimental assumptions which influence the criteria of class formation sometimes determine experimental results. Feigl (40) demonstrated the logical character of the principle of induction which generalizes the act of perception. However, Stevens (109) maintained that the criteria of class formation can be operationally defined.

The problem of class formation has been considered by the logical positivists who undertook a systematic study of the philosophy and logic of science. This, as Carnap (30, 32) conceived it, would be nothing but the study of the logical syntax of the language of science. The goal of the

study of the logical syntax of the language of science was to purge logic of its inherited metaphysics, and to exclude from the language of science all concepts which could not be empirically justified. Logic would thus become a linguistic convention, and anyone would be free to use his own form of language, provided only that he give syntactical rules instead of philosophic arguments. The criteria of class formation would thus become linguistic conventions or rules of the logical syntax of the language of science. The logical positivists hold that all scientific propositions are reducible to protocol sentences—empirical reports of the simplest elements of experience. Carnap (29, 31) and Feigl (40) demonstrated how this view is justified by the principle of induction. More recently, however, Buchdahl (26), Bures (27), Katsoff (66), Katsoff and Thibaut (67), and von Bertalanffy (116), while adopting the viewpoint of scientific empiricism, derived propositions involving broad theoretical assumptions which could not be reduced to protocol sentences as explanatory principles or models to guide scientific inquiry.

The Metaphysics of Science

There is wide divergence of opinion on the role of models and of principles of explanation in science. Carmichael (28) argued that the use of formal terms for classes, variables, and relations is characteristically metaphysical and that modern science is accordingly metaphysical. Katsoff (66) presented the paradox of interpretation. According to this, if a fact is such only in a frame of reference, then no fact can occur which could cause a given frame of reference to be rejected. A statement of existence, therefore, must have reference beyond the system in which it occurs, and its verification must be transformable into a statement in another system in such manner as to be equally true. Whorf (119) warned against the assumption that theoretical models represent reality, and London (75) argued for the acceptance of models only on the principle that they are in correspondence with reality. Ketchum (69) showed meaning to be both cognitive and effective, so that the attitude of symbolic purism drains language of all meaning. In his critique of logical positivism, Joad (59) questioned the purism assumed in the positivist approach. Deutsch (36) maintained the validity of communication models such as those of cybernetics. Ruesch and Bateson (100) adopted the communications model for the interpretation of the whole matrix of psychiatry. Wiener (120) described a communications model. Fiala (42) regarded experiment as bridging the traditional epistemological gap between the observer and the observed, but concluded that under the newer interpretations of the principle of methodological physicalism the content of epistemology is reduced to physiological processes. Wisdom (121) pointed out that a negative feedback system is an error-correcting device, and that on this principle of interpretation cybernetics has postulated the negative feedback system as a model of the central nervous system. The way in which models aid in

establishing laws of nature in the field of biology was shown by von Bertalanffy (116). For psychology the possibilities for models and principles of interpretation are: (a) classical static and dynamic principles, (b) molar and molecular principles, and (c) material and formal principles.

On the question of the role of models and of principles of explanation, it is interesting to note that Toulmin (115) pointed out that Freud's method is suited for the investigation of "the motives for" rather than "the causes of" neurotic behavior. Brown (20) also noted the limitations of Freudian theory from the point of view of strict scientific method. Boring (13, 14) argued that scientific truth is truth by agreement, "a social truth," and that unconscious bias and in-group acceptance are factors in the validation of scientific belief. Falk (38) showed that cultural assumptions concerning reality are prior to and affect scientific theory. Stephenson (106) pointed out that "experience" has sometimes been confused with "behavior" in the interpretation of experimental results. Within the field of group dynamics, the pioneering theoretical work of Lewin (71) has been carried to the point of investigating group relations under experimental conditions. Cartwright and Zander (33) assembled most of the relevant studies on group dynamics. They showed that differences among investigators can be reduced to three areas: (a) data collection and theory building, (b) the basic variables which determine the properties of groups, and (c) the objects of study and the technics of investigation. Cattell (34) argued that factor analysis is an appropriate method for investigation of group dynamics. In connection with the "action research" of investigators in the field of group dynamics, it is interesting to note that Allport (2, 3) objected to the use of mechanical and physical models and to "motorized psychology," which is now giving way to the concept of "action" with its presumption of ego-involved participation of the organism. Parsons and Shils (88) attempted to develop a theory of social action based on a "need-cathexis" psychology. Homans (55) also attempted to develop a theory of social action based on the notions of participation and interaction.

Principles of explanation are sometimes implicit in methodology without being explicitly recognized as explanatory principles. Deutsch (35) described the tendency of social scientists to fall back upon physical models for explanation. Feigl (39) noted that an analysis of the psycho-physical problem required the development of the technics of modern logic. Fitch (43) showed the value of symbolic logic for behavior theory, but Hall (51) warned of the dangers of the use of symbolic logic in psychology. Wittgenstein (122) demonstrated how the purist approach would reduce all propositions to the form of atomic sentences. Scientific method was identified with the Boole-Frege logic by Woodger (123). Kantor (64) showed how logical principles are involved in psychological theory, and Kardiner (65) showed how the methods and objectives of psychoanalysis and psychology differ. In connection with the problem of quantification in

psychology, Brower (19) pointed out that quantification is itself a type of explanatory principle. Brown (21) developed the notions of topological and hodological space as explanatory principles. A phenomenological system of explanation in psychology was called for by Syngg (104).

Guthrie (49, 50) and Hilgard (53) considered theories of learning and how they differ with respect to explanatory principles involved in the whole-part problem. Hull (56) argued that intervening variables must be tied to strictly empirical functions, and MacCorquodale and Meehl (78) emphasized the need for a clear distinction between hypothetical constructs and intervening variables. Marx (80) proposed the introduction of the "experimental-control variable" to supplement the vocabulary of theory construction. Common methodological principles in the social sciences were described by Kaufmann (68). Littman and Rosen (73) showed how molar and molecular principles function in the different schools of thought. Walker (117) showed how both psychological and sociological principles must be used to explain behavior. Rashevsky (95, 96, 97) gave applications of his mathematical biophysics methodology to the social sciences.

The Logic of Method

The literature of the behavioral sciences indicates a widespread need for the formalization of theory thru the development of a more rigorous language of behavior and a more unified vocabulary of theory construction. Philip (90) showed that the frame of reference concept running thru psychology provides the material for a formalization of theory, and that in terms of the frame of reference concept a methodological unity could be developed in the behavioral sciences. London (76) protested that behavior scientists have not learned the lesson of the new physics, that they are still working in terms of a naive deterministic philosophy, and that psychological theory puts reliance on unneutralized symbols which have not been purified from the standpoint of methodology. Thouless (110) pointed out that theory construction requires the development of a language to talk about methodological problems. Quine (94) demonstrated that empiricism need not involve a dogmatic reductionism and that all symbolic constructs need not be grounded in terms that refer to immediate experience. Brunswik (23) stressed the necessity of distinguishing the structural and functional properties of the unity of behavior. Argyris (4) pointed out that different theoretical approaches can be defined in terms of whether the guiding ideal is "prediction" or "explanation." Golightly (48) showed that the complementarity principle of modern physics can be applied to human behavior and that different theoretical approaches can be regarded as alternative and complementary ways of describing phenomena.

The methodological unity of the behavioral sciences would, therefore, imply a unified vocabulary of theory construction. Hempel (52) demonstrated that the growth of the sciences involves the development of a system of constructs, and that constructs exhibit both qualitative and quantitative

aspects which are revealed in theoretical divergences. Webster (118) indicated the potentialities of the calculus of variables for theory construction. Flanagan (44) argued that concept formation is one of the important ingredients of scientific progress. Lindzey (72) demonstrated that constructs lacking in existential status and direct empirical reference, which do not fit into the categories of hypothetical construct or intervening variable, nevertheless enable the scientist to structure his theory. Newbury (87) showed that operational psychology contains epistemological and ontological assumptions which become determining factors in the types of constructs derived from observations. Perkins (89) examined Gestalt psychology and found that contrary to positivist requirements it contains statements which cannot be translated into and do not have the same meaning as statements of overt behavior or physiological processes, and which meet the requirement of intersubjectivity but not that of physicalistic interpretation. Adams (1) showed how concepts, on operational analysis, become operators. George (46) argued the necessity for a unified language of behavior, and for a broad postulational technic by which symbolic constructs can be formally stated; he (47) also argued that constructs play a complementary role in the different systems, and that the principle of complementarity implies a methodological unity. McGuigan (79) warned, however, against premature attempts to formalize the language of behavior. Maatsch and Behan (77) called for a specification of the rules concerning the admission of constructs in theory construction.

Conclusion

The study of the methodological problems of the language of science is facilitated by the introduction of linguistic conventions and symbolic constructs which reduce the varied usage of theory construction to a small number of primitive syntactical notions. It has been found that scientific concepts specifically related to problems of theory construction can be reduced to three primitive syntactical notions. The terminology proposed consists of three terms which are widely used but which remain ambiguous with respect to their translation into the different systems. Scientific theory construction generally involves the notions of *construct*, *operator*, and *variable*. From the methodological point of view, the different approaches to theory construction can be characterized in terms of our primitive syntactical notions, with the auxiliary concepts of *hypothetical construct* and *intervening variable* reserved for use in cases where the primitive notions have not been unambiguously derived. The need for unambiguously derived definitions of these primitive syntactical notions is particularly acute in the behavioral sciences, where resort to the auxiliary concepts is frequently necessary. But in this respect the behavioral sciences do not differ from the physical sciences since in modern atomic physics the use of auxiliary concepts has become a deliberate methodological requirement. Both physics and psychology are passing from what Lewin (70) called

the Aristotelian to the Galilean modes of thought; but this transition might more accurately be characterized, from the methodological point of view, as a passage from the logic of Aristotle to the logic of Hegel.

The classical experimental set of variables between which the behavior scientist wishes to establish functional relationships and derive empirical laws are: (a) R-variables, measurements of the behavior or response of organisms, sometimes called dependent variables; and (b) S-variables, measurements of physical and social factors and conditions presumed to influence or determine behavior, sometimes called independent variables. But the actual variables entering into a behavior situation, as opposed to those which are under deliberate experimental control, are so many and their structure is so complex that it is difficult to derive the mathematical form of the equations directly from the empirical data without the use of auxiliary theoretical devices. Thus, it is permissible to introduce hypothetical constructs and intervening variables into an experimental set where all the variables are not known, or where the precise nature of their functional relationship is not known. The functions relating the two sets of variables are either broken down into successive sets of simpler component functions or built up into successive sets of more complex component functions. It is this process of transforming the functions relating the variables of an experimental set into successive sets of component functions which requires the introduction of the auxiliary concepts of hypothetical construct and intervening variable. At a more advanced stage of inquiry, therefore, scientific theory construction requires the *construct* or the system of such constructs, the *operator* or the matrix of such operators, the *variable* or the set of such variables, the *hypothetical construct* or the system of such constructs, and the *intervening variable* or the set of such variables. These five terms, the three primitive syntactical notions plus the two auxiliary concepts derived from them, represent a formalization of the vocabulary of scientific theory construction.

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CHAPTER III

Social Dividends of Education

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AT A TIME when education, particularly public education, is beset with critics both friendly and unfriendly, informed and uninformed, well-meaning and vicious, it would be very satisfying to present irrefutable evidence that the educative process can be credited unequivocally with contributing to all that is good in American society even while it serves as a deterrent to all that is undesirable. Unfortunately, when one is confronted with the task of demonstrating in any final sense the cause and effect relationship underlying human behavior, the only point which can be made with any degree of certainty is that it is almost impossible to validate causative explanations of individual action.

There is, of course, a common and classic line of argument which brushes aside all doubts, an argument which has unfortunately been used by friends of education as well as by its opponents. The argument is, in the classic phrase, *post hoc, ergo propter hoc*. This is the simplest of explanations for human behavior, its very simplicity, apparently, serving as an irresistible lure for those who would "prove" one thing or another about the consequences of schooling. Certainly, it is the most common implicit assumption one finds in reviewing research which deals with the outcomes of education. If, or perhaps better, when one rejects this argument, however, it becomes extremely difficult to locate much significant research which bears on the problem of the social dividends of education.

Lest the reader gain the impression that there is nothing to be said for research dealing with educational dividends, it should be pointed out that there are some promising studies reported herein. However, it cannot be too strongly emphasized that much of the research referred to here must be examined quite critically and the "conclusions" accepted more as indexes of explanations than as conclusive demonstrations of fact.

Patterns of Investigation

It is interesting to note, in checking previous reviews of research, how the emphasis shifts as the politico-social climate changes. Clark (8), in the issue of the REVIEW for February 1940, included a large number of studies which were patently the outgrowth of the uneasy economic situation that characterized the 1930's. McGuire (32), in the February issue of the REVIEW appearing in 1952, found a preponderance of studies dealing with guidance, placement, and occupational adjustment. The present review, essentially dealing with the period 1951 to mid-summer of 1954, is perhaps best characterized as emphasizing attitudes and personal, social, and occupational adjustment.

One should not be surprised by, nor necessarily critical of, the fact that human beings are prone to concern themselves with what is dominant on the immediate societal scene. Nevertheless, it seems reasonable to suggest that research, if it is not to be fortuitously structured and ephemeral in its application and consequences, should have its genesis in more fundamental considerations than the happenstance of immediately perceptible societal problems.

Altho it has already been pointed out that causation is difficult to demonstrate, it should be permissible to suggest that the current social scene forms an effective backdrop for the patterns of research which became apparent as this review progressed. In essence the patterns are these: There were innumerable studies concerned with attitudes and attitude change, particularly intergroup attitudes. A considerable number of studies attempted to show the effect of education upon adjustment, including social, personal, and occupational adjustment. Studies relating to effectiveness of thinking were rather few in number, but there now appears to be an increasing interest in this problem. Studies dealing with civic and political participation appeared to be of chief interest to sociologists and "pollsters," the educational factors in most of these studies being subordinated to more readily ascertainable elements such as age, sex, and income status. Studies of esthetic enjoyment and appreciation, as well as studies of leisure activities, currently have an orientation which makes it difficult to include them in this review.

Schooling in Relation to Income, Occupational Adjustment, and Mobility

Reviews of research dealing with job satisfaction have appeared periodically since the 1930's. The reviews by Robinson (47, 48) and by Robinson and Hoppock (49), which appeared since 1951, all tended to emphasize the idea that job satisfaction or adjustment was more likely to occur when individuals had counseling help either prior to or during their employment. Included in some of the articles reviewed was fragmentary evidence suggesting that high-school graduates were more likely to make satisfactory vocational adjustments than nongraduates. However, many of the articles referred to emphasized the point that job satisfaction was part of a matrix of total adjustment patterns rather than the product of such discrete factors as amount of schooling.

One difficulty in trying to establish relationships between schooling and occupational adjustment lies in the fact that it is almost impossible to treat "schooling" or "amount of education" as a single element. Bruce (4) made this point indirectly when he suggested that education was an important factor in success on tests of ability, skill, and knowledge. He then went on to say that education might be of little or no importance in doing well at a particular task, in this case serving as a factory foreman.

Mosel (35), attempting to predict performance of sales personnel, indicated that amount of education proved to be the second most significant criterion of the 12 he employed. However, considering that other criteria included such items as height, weight, area of residence, and marital status, there is doubt that this was a definitive study.

Cuony and Hoppock (9) reported the effectiveness of a course dealing with job finding and job orientation. However, at one point they concluded, that the higher income reported by the group studied would justify the teaching of the course if superior earnings were attributed to the course. In a more elaborate and more definitive study, Schmid (51) cited a range of correlations between .79 and .95 in studies of incomes and college graduates. He also cited correlations between .81 and .93 in studies of income and school grade completed. In reporting on correlations between median grade completed and occupational level, he cited high positive correlations for professional workers and for proprietors, managers, and officials, and high negative correlations for laborers and the unemployed. He also referred to negative correlations ranging from $-.27$ to $-.76$ between median grade completed and the fertility ratio of the population. Since his study was based on census data, he used a scale analysis technic in order to establish the ecological pattern types. Even allowing for some error, however, the patterns he reported are impressive, assuming that the census data were reasonably reliable.

It is interesting to note an affirmation of an unpopular contention relative to education and mobility. Deasy and Anderson (11), after investigating the social background of students at the University of Kentucky, concluded that the general assumption of vertical mobility thru college attendance is not entirely defensible. Their own conclusion was that economically favored youth have been, thru the early decades of this century, and continue to be, disproportionately represented in college. They suggested further that the veterans' program did not affect this pattern to the degree commonly assumed.

Additional support for the proposition that education, both public-school and higher, is class structured comes from studies done in Indiana and Connecticut. Mueller and Mueller (36) stated that college attendance is an index of class, a product of class structure, and a means of social mobility. Davie (10), after studying almost all 16- to 17-year-olds in New Haven, Connecticut, concluded that there was a very real difference, both as to type and amount of schooling, among the different social levels. The real contribution of education to social mobility appears, consequently, to be something less than popular opinion would assume.

The study by Ginzberg and Bray (18) offered an effective summary of the relationship between education, occupations, mobility, and human resources. Altho much of their study was concerned with problems usually thought of as specialized, since they dealt primarily with the Southern Negro, the Armed Services, and the Southern economy, the scope of their study warrants its interpretation in relation to the national scene. The

study offered convincing data demonstrating that the relationship between education and economic advance was very close. Furthermore, the study gave considerable support to the proposition that meeting civic responsibility was a direct function of education, at least in terms of the lower extremes of literacy. In addition, there was evidence here that education, when defined as literacy, was crucial to both economic and social mobility. Finally, there was some demonstration of the fact that illiteracy had become a barrier to agricultural employment, the illiterates finding it extremely difficult to retain even their peripheral position in the rural economy. Clearly this study does not answer all questions as to the value of schooling. However, there is ample evidence here suggesting that minimal education, or literacy, is essential not only for the more honored economic and social groups, but also for all economic and social groups.

Schooling and Attitudes

The literature dealing with changes in social attitudes and behavior was reviewed by Gustad (21). He indicated that there was considerable conflict as to just how changes in attitude and behavior could be shown. Furthermore, he cited, thru quotations, various differences as to how attitudes were defined. Altho he then said that the number of good studies of attitude change was small, he later concluded that attitudes did change, that there were many reasons for such change, not all of which were the direct result of organized schoolwork, and that direct efforts to change attitudes had been effective.

This summary of the literature is of considerable interest since a number of studies completed more recently offer very contradictory evidence as to how attitude change is achieved, the particular contradiction arising at the point of whether direct or indirect technics are most effective. Bogardus (2) reported significant changes in "Ethnic Distance Quotient" for a group which devoted six weeks to an intercultural workshop. Similarly, Kagan (26) found a direct method, wherein a particular intergroup tension was the focus of discussion, to be the most effective means of modifying attitudes. Hayes and Conklin (24), however, concluded that a technic focusing on vicarious experience was superior to a method involving direct experience. Interestingly enough, they suggested that this superiority arose from the fact that the method of vicarious experience was easily manageable while the method of direct experience was not. Leslie and Berry (31) reported two groups scoring more favorably on "internationalism" after completing certain course work, but only the group which had directly concerned itself with the United Nations scoring more favorably on items dealing with the United Nations. Trager and Radke-Yarrow (55) were quite positive in stating that giving information about differences was an ineffective technic for adults and children alike. They also referred to current beliefs relative to prejudice, indicating that neither intergroup association per se nor homogeneity of grouping which

assumed that noncontact yielded nonreaction seemed to be a defensible principle on which to base the reduction of intergroup prejudice. They went on to conclude that children's attitudes change, however, when an experimental social atmosphere is created so as to lead to more desirable experiences.

In reviewing these studies, it began to appear that the really crucial element is not so much the degree of directness necessitated by the methodology, but rather the degree of threat the subjects feel or could be expected to feel. That is to say, changes of attitude as expressed verbally seem to reflect the degree to which one can assume the respondents feel themselves to be confronted by the likelihood of actually behaving according to their expressed attitudes. That this is not a baseless assumption is borne out by Kahn (27) who reported a common structure of attitudes toward Negroes for both educated and uneducated groups and a high order general factor identified as threat which appeared equally in the two groups. The uneducated showed greater apparent hostility, but Kahn hypothesized that this was more the result of the educated group's facility at masking prejudice than the result of any true difference between the two groups on this factor.

A number of other studies dealt with the relationship between educational status and either amount or intensity of prejudice. Gough (20), in a study of anti-Semitism concluded that the more anti-Semitic subjects were characterized by lower intellectual and educational level. Hoult (25), in studying the attitudes of native New Mexicans toward six ethnic groups, showed that the *Bogardus Social Distance* scores increased inversely to educational level, ranging upward from the "college or more" group to the grade-school group. Prothro and Miles (43) compared attitudes of middle class adults and university students in Louisiana and found that the adults had a less favorable attitude toward both Jews and Negroes than did the college students.

The conflicting nature of some of the research dealing with attitudes was nicely reflected in the studies done by Centers (7) and Gilbert (17). Both studies were based on an earlier piece of research dealing with ethnic stereotypes, Centers reporting essential agreement with the earlier research whereas Gilbert reported a marked difference, his results indicating that presentday students are less inclined to resort to ethnic stereotypes than were the students tested in 1933.

Amerman (1) summarized the situation aptly in her review of the literature dealing with school programs and race relations. Her general conclusion was that there were numerous reports of experimental programs, but that there was a limited amount of rigorous research or theoretical discussion on the problem.

The relationship of educational status to political and civic attitudes has been another area of investigation. Rubin-Rabson (50) investigated the relationship between education, several other factors, and conservatism-

liberalism. She concluded that there was a positive relationship between schooling and liberal attitudes even tho this attitude did not apply to acceptance of Negroes. She also found indications that threat affected reactions noticeably. Nahm (39) studied the societal attitudes of a group of nurses and found that those who had had at least some college work were more democratic in their attitudes than were the high-school graduates. On other aspects of political and civic attitudes, Smith (53) hypothesized that differing personal expectations and varying group memberships were the basis for differing attitudes. Similarly, Garrison (16) concluded that college students differed in their attitudes toward domestic and international problems primarily because of differences in home and community background. He noted, further, a striking absence of relationship between college training and attitudes held on the various issues. Certainly there is reason to suggest that political and civic attitudes may well be fundamentally structured by the home and the community and that the influence of education is decidedly secondary.

Studies of other categories of attitude seem to lend further support to the proposition that attitudes are fundamentally nonschool structured. Remmers and Drucker (45), reporting on youth's attitudes toward child behavior, found that scores tended to be superior for youth whose father or mother had had collegiate education. There is, of course, a double interpretation possible here. Education, thru the parent, would have an indirect influence on the child's attitude. At the same time, tho, the primary influence would arise from the parent or home situation rather than the formal schooling that the child was undergoing at the time. Lazar (29) reported on the similarities between college students and faculty in the choice of social values. He found that seniors approximated faculty values more nearly than did freshmen. He also stated that the correlation between scores for seniors who subsequently graduated and scores for faculty was significantly greater than the correlation between scores for faculty and for those who did not graduate. A parallel superior correlation held between faculty and freshmen who later graduated as compared with faculty and freshmen who later withdrew from college. Lazar's conclusion that values change as the situation changes leads to the suggestion that college students, having lost the home influence as a direct and continuous factor in their lives, tend to adopt the attitudes dominant in the collegiate social community. At the same time it may be permissible to suggest that this shift in attitudes could be partially attributable to a more direct concern with values in college work than in high-school work. The latter interpretation would, of course, give formal schooling a more significant role in attitude change than would the former. Mull (37) reported results which lend further support to this proposition since she indicated that ethical insight, as measured by Hollingsworth's scale of ethical insight, improved among college women as they progressed thru the college program. She also reported that those who violated the honor system did not do as well academically as did nonviolators.

Schooling and Effectiveness of Thinking

A recently published major study reported by Dressel and Mayhew (15) indirectly summarized the difficulties which confront any individual or group interested in ascertaining the relationship between schooling and the ability to think. There is, of course, the major problem of defining or describing the objective manifestations of thought. Secondly, there is the problem of arriving at some means of measuring this phenomenon which will not be more representative of native intelligence or acquired knowledge than of the processes and products of thought. In substance, improvement in thinking was reported for groups when they were tested in specific course areas and when they were tested on a general critical thinking test. Consequently, the generalized summary of the study would lend support to the idea that schooling does improve skill in thinking if the tests of thinking here used are acceptable. This study, along with a companion report edited by Dressel (14) tended to substantiate the proposition that students do acquire more information as they proceed thru the school years and that their attitudes do change. Additional support for the proposition that schooling leads to greater information is also found in a study reported by Lannholm (28). Dimond (13), however, reported somewhat negative results for work carried on in the Detroit public schools. He concluded that little attention was given to the teaching of thinking and that, when a deliberate effort was made to emphasize such teaching, teacher insecurity and inadequacy and pupil conditioning to other forms of teaching made it extremely difficult to teach successfully for thinking. Similarly, Miller (34) concluded that there was no dependable relationship between grade in school and ability to recognize fallacies in reasoning. He later concluded that instruction could improve the ability to recognize fallacies. The implication of this would seem to be a substantiation of the belief that thinking, as a process, is not given much consideration in the schools.

Four studies by Dennis (12), Nafziger, Engstrom, and MacLean (38), Radvanyi (44), and Sykes (54) all lend support to what would appear to be both a popular and "common sense" belief that schooling is effective in increasing general knowledge and extent of information.

Schooling and Personal and Social Adjustment

The literature dealing with social adjustment among college students was reviewed by Gustad (22). Perhaps the most significant conclusion he offered was that the very concept of social adjustment is in need of definition. From his review of the literature he concluded that those students who were involved in extracurriculum activities tended to show less maladjustment than nonparticipants and also tended to do better academically. However, native intelligence also appeared to play a role in this situation, so that the conclusion cannot be upheld without reservation. Resnick (46) studied the relationship between grades earned by high-

school students and certain adjustment tests. He reported correlations ranging from $-.07$ to $.70$, suggesting that there was a relationship between grades earned and measured adjustment. It appears reasonable to conclude from his evidence that academic ability, rather than grade level, is the major correlative of adjustment. Contradictory evidence as to the value of specific efforts at helping students achieve personal and social adjustment can be found quite commonly in the literature. Typical evidence of these contradictions can be found in studies made by Braden (3) and Cantoni (5).

One of the common assumptions in our society is that the better educated are apt to have fewer children than the less well educated. It might be worth noting here that the general proposition was upheld in studies reported by Hatt (23) and Nelson (40).

Schooling and Social Conduct, Delinquency

The literature dealing with the relationship between schooling and social conduct, including delinquency, reports the same kinds of contradictions as are found in the topics already discussed above. In discussing college students, Williamson, Jorve, and Lagerstedt-Knudson (58) reported no marked difference between students who were disciplinary cases and students who were not. Wattenberg (56) reported a study of repeater and nonrepeater boys who came to the attention of police. A favorable attitude toward school proved to be a positive indication for nonrepeaters, but the conclusion of the study makes it clear that the author rejected any suggestion that delinquency could be explained by any single cause. In a later study, Wattenberg (57) reported on the police records of a group of 11-year-old boys, and found that repeating was closely related to poor schoolwork and low intellectual ability. Glueck (19) studied matched groups of 500 delinquents and nondelinquents, reporting major differences between the two groups in school adjustment. However, he concluded with the proposition that the explanation for delinquent behavior lies in a combination of biologic and sociocultural factors. To bring the general analysis to a full circle, a study by Powers and Witmer (42) found that teachers could identify potential delinquents. However, boys who were later classified as maladjusted, but not necessarily delinquents, also presented behavior problems to teachers.

Lemert (30), reviewing studies of alcoholism, rejected the view that there are significant educational differences between alcoholics and non-alcoholics. The conflicting evidence reported on this point is reflected by Manson (33) and Pettit (41). Pettit upheld the contention that the better educated tend to have a higher alcoholism rate. Manson, however, concluded that alcoholics leave school at an earlier age than nonalcoholics. Basically the differences in these results, as in many of the contradictory studies reported in this review, seem to lie in the sampling technics and the control measures employed. It may well be that human behavior is

sufficiently complex to make it unlikely that the usual "controlled" research can really control variables sufficiently to yield unquestioned explanations of these psychological phenomena.

The Value of Schooling

An interesting, tho not definitive, study of attitudes toward college education was reported by Cautley (6). The report, dealing with responses of members of the American Association of University Women, is of interest because it contains many of the general impressions that one commonly hears expressed. One of the dominant values of college education reported is that of impact on personal structure. This is expressed in numerous ways, reflecting social, general cultural, professional, and economic advantages of such education. Some members of the group felt that they had improved their skill in thinking, but other members recommended that the colleges devote more time and energy to helping students improve their thinking skills. As is common with such survey studies, the professional reader is tempted to interpret the reported comments since they frequently appear to mask rather than explain the consequences of education for the particular respondent. Such forms of intellectual entertainment, however, are not the proper responsibility of the present review.

Altho the volume edited by Smith and others (52) is not a research study in the usual sense, it contains material dealing with the underlying issues involved in the question of social dividends of education. The reader interested in beginning with the theoretical basis of the problem should find it profitable to refer to this work.

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CHAPTER IV

Social Influences on Children and Youth

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THE relation of the school to other educative agencies in our society has been of increasing concern to educators within the last decade. Of the many nonschool agencies, including home, youth organizations, and recreation, most attention has been directed to the favorite leisure pursuit of children and youth—televiwing. The impact of television in the daily lives of the young has led educators into this new field of research. In addition, further studies on the effects of comics and movies have been undertaken recently to discover what, if any, relationship exists between juvenile delinquency and the reading of comics and attendance at the movies. Altho no large-scale study of the effect of mass mediums upon children has been attempted since the Payne Fund Studies of 1929, the influence of mass mediums, especially of comics and television, on the values and character of the young continues to engage more attention than that of all other educative agencies in American society today. The Fifty-Third Yearbook of the National Society for the Study of Education (43) reflects this interest.

Influences of Television

Many studies reported the number of hours a day children devoted to television. Witty (64, 65) found a slight increase in time spent, from an average of 14 hours a week in 1951 to 17 hours a week in 1953. Lewis (31) reported a drop from an average viewing of 23 hours a week in 1949 to 16 hours in 1951 and attributed this to a decline of the "novelty" factor. In a study of television preferences and habits Mahony (38) administered questionnaires to 1000 pupils in Boston schools (Grades III and V); she found that 75 percent watched television seven days a week, and that a few reported a total of eight to 10 hours of viewing a day, with an average of two and a half hours. Maccoby (37) found, for 622 Cambridge, Massachusetts, children, an average of two and a half hours on weekdays and three and a half hours on Sundays were spent watching television. That the enthusiasm for televiwing may persist after the initial attraction has subsided was pointed out by Coffin (9) and received support in Witty's report (65) in which he concluded that strong interest continues. After five years (1948-1952) of checking the effect of television on family life in the test city "Videotown," Marx (40) reported that there was no evidence to substantiate the theory that interest would subside in the average home. Some indication of a slight falling off of viewing among children was noted, but adult viewing held up the average.

Differences of opinion on the unfavorable or favorable effects on school achievement were reported. Mahony (38) indicated that some students felt television was an aid in schoolwork, but went on to state that of 808 children interviewed only 174 reported having read any book since viewing television. Gesselman (16), who compared the reading activities of 30 viewers of given ability paired with nonviewers of approximately the same ability, found that television had not yet affected reading comprehension adversely and that there was no appreciable difference between the two groups in the reading of library books, comics, children's magazines, or daily papers. However, this study did indicate that the nonviewers excelled somewhat in possessing positive emotional traits altho the difference was not statistically significant.

In a study of 52 intermediate-grade children, Wells and Lynch (63) found no negative correlations between the variables of televiewing and free reading, indicating thereby no evidence of harmful effects on reading from televiewing. A survey reported by Dunham (13), comparing the achievement of televiewers with that of nonviewers in Grades VI and VII, revealed no significant difference, but the data showed that poor televiewing habits, lower IQ's, lower parental control, and poorer school achievement tended to be found in the same child.

Witty (66) reported surveys of junior and senior high-school pupils and indicated results were similar to those found at the elementary-school level. Excessive televiewing seemed to be associated with somewhat lower academic attainment. Thru his questionnaire survey, Witty found that the time spent by boys was greater than that spent by girls, with an average time of two and three-quarter hours per day. An intensive program of research into televiewing patterns as they developed in the South Shore High School community in Chicago over a period of almost four years was reported by Lewis (31). He found that students who spent more than a weekly total of 11-15 hours of televiewing were less proficient in word fluency, verbal meaning, reasoning, memory, and spatial concepts, and that such students could not afford to watch 15 hours a week without lowering their subject ratings.

In February of 1953 about half the homes in the United States had television sets. To determine the effects of ownership on the individual, the Psychology Department of Hofstra College set up a television research program to conduct periodic studies of the new medium's social and psychological effects. The first of these studies, by Coffin (9), reported results of an initial series of a hundred "depth interviews" and suggested that television may bring about appreciable changes in the family pattern of leisure-time activities, especially among middle-class families. Sweetser (58) conducted a study during which 254 families with children of grade-school age were interviewed to determine the initial effects of televiewing. His major findings were: (a) the overt behavior of adults was affected more than that of children; and (b) the effects tended to persist for the

first two years of televising, with the greatest effect being reallocation of time, particularly for those with limited access to other activities.

Scott (51) evaluated the influence on attitudes toward law enforcement and law agencies thru questionnaires given to 478 pupils in two different socio-economic groups in the East San Francisco Bay area. Some effect on attitudes was noted, but more for those in the low socio-economic group than for those at the higher levels. Forty-three percent believed sheriffs were dishonest and 79 percent felt there was mistreatment of "bad" men by law enforcement officers. The evidence indicated the value of further study of the influence of television programs on the formation of attitudes and concepts.

Influences of Radio

Radio-listening habits of 3125 public-school pupils (Grades V to VIII) were determined by Ricciuti (48) thru a questionnaire on which the pupils listed programs listened to regularly. Their responses gave no evidence that crime and adventure programs developed adverse emotional tendencies. The writer concluded that such programs were not harmful to children in general. In contrast, Rowland (49) stated that the "specific effects of radio cannot be measured . . . cannot be separated from the multiplicity of other life experiences." He found that extensive radio listening consumed more time among girls of junior high-school age than among boys; similarly, extensive radio listening was found to be more normal for the adolescent girl than for the boy. He also found that the average middle-class family listened 24 hours a week; the lower class, 18½ hours; and the upper class, 16 hours. Lazarsfeld and Kendall (28) reported that the influence of the radio upon family life was greater than that of the press or of movies.

Mitchell (41) studied the effect of radio programs on the silent reading achievement of 91 students in Grade VI and concluded that, in general, achievement was adversely affected by a variety of radio programs. In this respect there was no difference found between boys and girls, but pupils with IQ's above 100 actually made significant gains during musical programs. Clark (8) made an analysis of out-of-school listening habits of two groups of secondary-school students. To serve as a check upon his conclusions, he made a second study three years later, with intensive interviewing substituted for the questionnaire used for the first group. Differences in radio listening seemed to be related to the social class of the listeners; and when listening was carried to any considerable extent, it appeared likely to interfere with schoolwork. His study pointed out the need for further analysis of the influence of listening on the daily behavior of adolescents as well as for exploration of social class differences. Lyness (33) found that radio was the medium that most young people would keep, giving up all others.

Influences of Moving Pictures

Sterner (54) investigated the attractiveness of the mediums of communication and concluded that it was interest rather than the medium that stimulated pupils to spend time to excess in these activities. In a study reported by Vaughn-Eames (62), over 1000 children from all sections of the country were questioned on their reactions to moving pictures. The younger child was found to react emotionally on the basis of his sense of security and experiential background, whereas the older child was more critical of and sensitive to sound effects, with the action and the quality of the story more important than the musical background or color.

Frank (15) quoted a number of psychiatrists and psychologists as agreeing on the point that radio programs, movies, and comics did not in themselves create fears, but for certain children stimulated anxieties lying beneath the surface. Their findings suggested that of the three mediums movies were likely to have the greatest and most lasting impact. In an attempt to determine the influence of movies on children, Heisler (21) compared movie goers and nonmovie goers among public-school children in Grades II-VIII with respect to chronological age, mental age, personality, and socio-economic level of parents. No significant differences were found. In another study (19) in which she compared children who attended moving pictures, read comic books, and listened to serial radio programs to excess with those who indulged seldom or never, she again reported no significant differences, but noted that the nonparticipants owned more books and participants were superior in achievement to those who did not indulge.

Influences of Comic Books

The reading habits of approximately 300 boys in New York City were studied by Lewin (30) to answer the question of whether the reading of comic books actually resulted in antisocial behavior. To offset the criticism that the ill effects of comics might depend on the time factor, another study was made of the same boys 18 months later. The results were identical, namely, that it made no difference whether youngsters read many or few comic books. Three surveys (5), requested and partially financed by the California Congress of Parents and Teachers, showed that, altho the reading of comic books was not a time-consuming recreational activity, it was widespread. The majority of the readers, however, read the animal and fun comics rather than the comics of sex, violence, and horror. In general, boys spent more time than girls and were slower to lose the habit.

A study reported in the *California Parent-Teacher* (6) concluded that little, if any, correlation existed between comic-book reading and behavior. The methodology of this study, however, may be open to question since "poorest" citizens were picked out on the basis of teachers' subjective judgment. In a comparison of readers and nonreaders of comic books of

the Farmingdale, New York, schools, Heisler (20) found no significant correlation between comic-book reading and poor adjustment, low grades, mental age, or socio-economic status. Sperzel (53) experimented with three groups of 15 pupils each from Grade V, evenly divided and matched according to IQ, socio-economic levels, and teachers' estimates of general scholastic ability, and likewise reported no appreciable effect on vocabulary growth or reading comprehension.

Recent claims of the effect of comics in causing delinquency have not been substantiated by valid research. Thrasher (61) pointed out that comics have become a "whipping boy for failure to control social breakdown." A study undertaken by Hoult (24) was based on a questionnaire given to two matched and comparable groups, one delinquent and one non-delinquent. Both groups read about the same number of comics, but delinquents read more "questionable" and "harmful" comics. The study, altho not conclusive, brought out the fact that belief in causal relationship was not justified.

Wolf and Fiske (67), in the first attempt made to get direct information from the children about the impact of comic-book reading on them, used detailed interviews with 104 children in a carefully stratified sample, aged 11-17, with half the children aged 11-12. This study showed that comics satisfied a real developmental need in normal children and were harmful only for children already maladjusted and susceptible to harm. Excessive comic-book reading was termed a symptom of maladjustment.

The Newspaper and Its Effect on Youth

Little evaluation of the effect of newspaper reading or of the press in general has appeared recently. Lyness (33) found in a study of Des Moines public-school students that 74 percent of the seventh-, ninth-, and eleventh-grade boys expressed a liking for newspaper stories of murders and robberies; few in any age group favored serious, informative content. During the winter months of 1944-45, Burton (4) measured the newspaper-reading behavior of senior students in Palo Alto Senior High School, using the recognition method. More than 62 percent of the boys and 52 percent of the girls got news from the radio, and only 33 percent of the boys and 28 percent of the girls named the newspaper as the source of news. According to a study reported by Marx (40), newspaper reading is about the only regular activity in which there has been no change since the advent of television.

Youth-Serving Agencies

Of the educative agencies in society impinging upon the development of youth, few have received the attention given to the mass mediums: television, movies, radio, comics, and the press. Youth-serving organizations and other clubs of character-building intent have received little considera-

tion in recent research. Chambers (7) revised the compilation of 45 national youth-serving agencies, commonly known as general character-building organizations, giving data on membership, purpose, activities, staff, and other pertinent points. Youth service projects of 33 organizations for the summer months were described by the Commission on Youth Service Projects (10). Altho Davis (11) stated that youth-serving agencies have contributed to making this age the best, McClusky (35) noted that only a minority of eligible youth were served by these agencies and then only those youth least vulnerable to delinquency.

In an evaluation of the camping program of the Camp Fire Girls, Schellberg (50) used a questionnaire in which each respondent considered 98 representative activities and experiences. She found that membership in the organization was not representative of all economic levels, most members being in the high-income group of the middle class. A survey (46) of a group of junior and senior high-school students in Schenectady public schools recognized that no conclusions could be drawn as to the effectiveness of the program of character-building organizations because of the impossibility of determining the membership. On the other hand, Goodykoontz (17) stated that from the program of individual and group activities come changes in attitudes, interest, and responsible behavior.

Recreational Activity

Survey of the literature on recreation revealed that investigation has been limited largely to the implications of leisure and to descriptions of probable values. Fitzgerald (14) attributed the paucity of research to lack of encouragement from the university specialists in the field. Hjelte (23) labeled the leisure-time activities as "the building blocks of American culture." McCall (34) found in a questionnaire survey of 249 unmarried members of Senior Extension Clubs that most of them participated in activities requiring little physical or creative activity, such as going to the movies and listening to the radio, but that those still in school participated in a greater number of activities, particularly in music and dramatics, than those not in school.

The concept of summer camping as an educative force is a fairly recent one. During the years 1948-1950 there was a phenomenal growth in the number of schools initiating camp programs. Summer camp, regarded as valuable training in democratic living by Kight (27) and Stone (55) has recently been considered a worthwhile experience in the year-round program of every child for one or more of his formative years. As of December 1950, 50 Michigan public schools carried on camping programs, some operating camps both summer and winter. Lifshitz and Sakoda (32) observed the behavior of adolescent girls in summer camps and concluded that the camp experience helped the adolescent to adopt more adult patterns of behavior. Thomas (60) reported an experiment in a summer camp experience with 20 maladjusted children referred by social agencies. In

their evaluation the sponsoring agencies stated that 10 of the children had gained more wholesome attitudes toward life, three showed slight improvement, and one who showed temporary improvement soon lapsed into precamp patterns of behavior.

Seman (52) evaluated a camping experiment in San Diego that combined recreation, education, and outdoor living. Questionnaires concerning healthful living filled out by 339 children gave evidence of character change as the result of this camp experience. Pioneer work in a seven-year experiment sponsored jointly by the Michigan Department of Public Instruction and the W. K. Kellogg Foundation was reported by Rehage and Sincok (47). A one-semester work-learn camp operated for potential drop-out boys resulted in a return to school of 90 percent of the drop-out prospects. The Michigan school camp program expanded from nine camps in 1946 to 80 in the 1952-53 school year. Manley and Drury (39), in evaluating camping programs, emphasized the values of taking education beyond the limits of the classroom and into the center of life and patterns of living with others.

Knowledge about libraries and their values for the reader remains largely opinion and judgment, untested by objective investigation. The shift, however, from focus on facilities to the use of these facilities in consideration of the interest, activities, and habits of children is clearly noted in the Thirtieth Yearbook of the Department of Elementary School Principals (42).

Andersen (1) found in a study made of 680 students' leisure-time reading (Grades VII and VIII) that more girls than boys liked to read, with peak ages of interest being 13 and 14. Types liked in order of preference were: comic books, fiction, animal stories, biographies, westerns. Wood (68) reviewed a storytelling project for high-school students who told stories weekly to approximately 115 elementary-school children in the library. For those who heard the stories, gains were reported in interest in the library, in fine literature, and in stories well told; and, for those who told the stories, in recognition of values in serving others.

Work Experience

Phelps (44) studied the reactions of 25 high-school youth who worked at two camps sponsored by the Laboratory School of the University of Chicago and the American Friends Service Committee. He reported that their expressions indicated increased insight into the social and economic problems of the community and more wholesome attitudes toward hard work. Henderson (22) in a similar study of student reactions found that 95 percent of the students felt that hard, physical work was beneficial, 60 percent said that democratic group living was helpful, and 90 percent claimed their whole outlook on life had broadened.

Work experience and its contributions to general education were pointed out by Dillon (12) and Ivins and Anderson (25); they indicated that

supervised school-and-work experience in secondary education tended to improve student attitude toward work, work habits, and school marks. Legg and others (29) reported a study of school-and-work programs made thru short interviews of a small sample of 42 high-school students; this study revealed that money values rather than life-adjustment values were the strong motivating forces. School-and-work programs need to be tested in comparison with other educational programs to find ways of using work experience without narrowing the curriculum into a work focus.

Bateman (2, 3) carried out well-controlled investigations in three high schools, using 263 equated groups of eleventh- and twelfth-grade students. He compared students having regular part-time jobs, for which they received pay, with nonworkers and found no statistically significant differences in attitudes toward high school nor toward high-school subjects, except in one high school. Here, he found nonworking boys expressed a significantly more favorable attitude toward school subjects. In the study in which Bateman used the *Bell Adjustment Inventory* as the criterion, he discovered no significant differences between workers and nonworkers in health adjustment, and a significant difference in emotional and social adjustment in only one school.

Family Life

The need for more systematic longitudinal studies of the role of family life in determining social attitudes of children has been frequently pointed out in the literature (56). A two-year study of identification in young children was reported by Maccoby (36). In an attempt to determine what methods of child rearing produce the greatest and least identification with parents, 379 families were interviewed, teachers were questioned, and the children were observed in a number of projective test sessions. While child-parent relationships were not clear, the preliminary findings indicated that the technics employed in rearing boys were more likely to produce aggressive behavior. Mothers appeared to set somewhat higher standards for girls in manners and neatness. Stout and Langdon (57) analyzed causation factors in good adjustment thru interviews with parents of 158 children selected by teachers as well adjusted. Two groups were studied, one in New York in 1949-50, and the other a year later in Illinois. The study indicated that environmental factors had little effect, but that recreation and family activities together played a large part in the lives of well-adjusted children.

One of a series of studies by Harris and others (18) on the broad problem of social responsibility suggested that attitudes of tolerance and good judgment in child rearing may be part of the larger complex of interpersonal relationships. Altho not conclusive, the findings revealed the possibility that the training patterns of mothers of highly prejudiced children differ from those of mothers of nonprejudiced children. A

projective test of the sentence completion type was used by Johnson (26) to identify and measure concepts held by adolescents concerning family figures.

A changing role of the father from "vestigial" to a more equalitarian relationship was noted in a study by Tasch (59) of 85 fathers in greater New York City. The attitudes and opinions of fathers with regard to their role in family life and the responsibilities, satisfactions, and perplexities which fatherhood entails were determined thru interviews. Fathers were found active in the care and rearing of children. Further research and more information was needed, especially in the area of sex-typing activities, which were not understood as such by the fathers. Doing things with their children in the time available seemed more important than the actual time spent. Podolsky (45) studied the effect of the father's occupation on the child's outlook and pointed out ways to help stabilize the child emotionally when the father has an occupation which makes the child feel socially inferior to and envious of others.

Problems for Future Research

Opportunity for further research in the field of social influences on children and young people is still great. Evaluation of the social influences of individual and group activities, work experience, and recreation is an especially fruitful area of research. More quantitative than descriptive literature is essential if schools are to assist more intelligently in personality development and character building. Intensive, objective studies over long periods of time of the life of carefully selected groups of children of many different cultures are needed to identify factors contributing to socialization and to explain the effects of parent-child relationships within the larger complex of society.

As was pointed out above, many studies have been made concerning the effect of the passive agencies of social interaction on the individual, namely, television, movies, radio, and the press. As instruments for influencing the behavior of people, these agencies have been studied more recently to determine their effects on maladjustment and antisocial behavior. No survey has been published on the educational use of television or on its effects on attitudes. Many questions on the social aspects of mass mediums in relation to education remain unanswered: To what extent are social expectations of children and young people determined by television, moving pictures, and the radio? Do moving pictures reinforce outmoded behavior and formulate stereotypes? What evidence is there that television and radio will make young people happier, better informed, and more understanding of the world in which they live? How is televiewing successfully assimilated by children in the total behavior pattern? Does excessive televiewing or comic-book reading indicate maladjustment of the child in the social framework of home and community rather than produce maladjustment?

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CHAPTER V

The School and Community Forces

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A MATRIX of conflicting social influences operates on schools, assisting or hindering every aspect of their task. Decisions about school policies are, or should be, made by boards of control. Board members are subjected to community pressures as are administrators and teachers; these pressures sometimes are exerted thru formal channels, sometimes expressed in informal ways. Community attitudes toward schools are often equated with pronouncements of noisy minorities. Decisions often are reached by members of the power structure and are then echoed by school officials who do not realize in what way they are complying with power figures. There has been a vast increase in social and educational research in these areas during the past few years. However, less than half the relevant studies located have been cited here. For much of this research, it is necessary to again ask Lynd's question: "Knowledge for what?" Raw material is now available for analyses, syntheses, and interpretations such as those made by Charters (22) and Gross (55). Thru such interpretations practice may become more intelligent and educational theory may be validated and extended.

Power Structure

In summarizing the Southern States Cooperative Program in Educational Administration studies of power structure at the county level, Pierce (103) treated conditioners of leadership and its role, leadership structure, social values of leaders, patterns of decision making, and implications for educational administration. Pierce drew upon two studies. One was by Wilson (126) who selected from 10,000 people the 20 with the most local influence and the four with countywide influence and assessed their control over education. The other was by Kimbrough (78) who recorded the operational beliefs of 11 of these power figures, dividing them into groups, each composed of similar individuals remarkably consistent in the beliefs upon which they acted about school, religion, politics, and societal ideals. In these rural communities decision making thru group process was ineffective; person-to-person commitments took precedence. Educators generally were nonleaders. In another study, Gleazer (53) disclosed two opposing groups in the power structure, as did Kimbrough, but found the superintendent important in the power structure.

In probably the most comprehensive single study on power structure, Hunter (65) tested methods for identifying and studying power figures in a small community, and then applied these methods in a metropolitan

area. Among more than a dozen interesting findings were: (a) the Negro community tends to parallel the power structure found among whites, and (b) no Negro leaders were included in the formulation of community-wide policy. Jenson (71, 72) developed ways of identifying opinion leaders and using them in school district reorganization. He also studied their social and psychological characteristics and their power-structure roles.

Newhill (94), scrutinizing the social role of the teacher, found the teacher relatively isolated, receiving low prestige despite the high value placed on education, an object of hostility from the lower-middle class, and hence not effective in the power structure. Male (88) demonstrated that teachers, acting thru a state education association, can resist pressures at state and local levels, and can exert pressures of their own.

Studies by Carpenter (20) and by Fetter (41) listed factors related to the position of individuals in the community power structure. Brown (11) emphasized social and psychological differences between high and low participants in the social structure. Coughenour's 16 judges in a farming community in no instance related prestige differences to social class position (26). Northwood (98) contrasted leaders (formal and informal) with nonleaders as judges of fact and opinion in their communities and indicated how leaders used knowledge and position to affect policy. Holloway (63) suggested that power structure, influence channels, and community pressures have little meaning except in reference to the basing of the self-concept in one of four postulated social groupings. Hurwitz (66) questioned the possibility of mutual understanding and satisfying relations among group members of unequal power.

Educators might learn from Bouma (6) how an effective community agency operated in the power structure; this agency was a city real estate board which had never lost a decision.

Channels of Influence upon the Schools

An historical analysis and a survey of current efforts toward developing good community-school reciprocating channels was made by the National Society for the Study of Education (92). Tipton's unique report (119) traced origins and channels of tensions in Central City, Indiana. His case study of integration is most important for today. Companion sociometric-sociologic definitions by Finger (42) and by Malcolm (87) of interaction patterns in a New England town yielded pertinent substance and procedure. The studies by Day (32), Miller (90), and Roth (110) indicated the relativity of channels and their relationships to regional, social, and psychological factors of community organization.

Muniz's study (91) revealed some—and implied a need for further inquiry into—channel structuring and channeling by the courts. Fowlkes and Watson (47) gave evidence that formal state channeling may increase local influence and that local, lay school leaders are general leaders as well as "upper" class occupationally. Gross (55) reported on the frequency and

types of channels influencing Massachusetts school superintendents. Pound (104) indicated some of the formal and informal structurings and channelings of formal agents of school control, as did Brubaker (14), Condit (24), Stapley (116), and Whalen (124). Schiff (111) revealed formal and informal channels of influences upon militant teacher groups and some of the latter's consequences as channels. Jenkins (70) invited inferences about the representativeness of lay advisory boards. Brasted (7) indicated some of the influences of Connecticut industry on the schools and found them increasingly in the general interest. Nichols' analysis (95) of the "new-type" foundation suggested a channel of a particular occupational influence not inimical to the general good. Fales (39) reasoned that service clubs in communities of 2500 to 20,000 people are increasingly prominent and promising channels. Endres' evidence (37) suggested the superiority of formal over informal channels for securing desirable parental influences upon schools. Weathers (123) reported operational duplication and confusion among voluntary, professional groups channeling influence on public schools. Oliva (101) defined the Daughters of the American Revolution as a local as well as supra-local channel, with great prestige, coordination, centralization, and both good and bad results. In putting the National Association of Manufacturers' educational efforts in objective perspective, Leach (79) was kinder than many of its critics, including *Fortune* (46). A technical study of the social functions of the press, radio, and movies and of the dynamics of interacting publics and mass mediums was made for the National Society for the Study of Education (93). Buelke (16), Ford (45), Luck (83), and Watson (122) found that newspaper coverage and the writing and timing of educational releases needed specific corrections; variations for community-types and size of circulation of the newspapers were observed. Umberger's intensive study (120) of lay magazines yielded valuable insight into such channels and influences. Erskine (38) and Foff (44) analyzed teacher-stereotyping in novels and drama.

Carpenter (20), Farley (40), Gleazer (53), Hunter (65), and Jenson (71) made studies further defining the identification of individual persons as influence channels, their socio-psychological conditioners and characteristics, and the probable representativeness of their influence. Northwood (98) indicated that official influence channels are probably more representative of their communities' immediate concerns than informal person-channels, contrary to most of the previous citations. If proportionate membership in formal organizations is necessary for representative channels, such organizations—excepting perhaps the rural church—according to more evidence revealed by Fetter (41), do not represent the lower social segment or rural residents.

Studies by Brookover (10), Callaway (18), Giffin (51), Johnson (73), and Thomas (117) somewhat clarified the effects of strictly cultural or unrationalized forces on individual persons as channels of influence upon the schools. Levitt (82) added a third variable to the ones called "impor-

tance to the individual" and "situational ambiguity of rumor" in order to account for individual differences in leveling and distorting.

Despite arguments by Axelrod (3) for the desirability of informal, friendly person-to-person channeling of influence, the bulk of direct and indirect evidence agrees with that presented by Bryan (15), Harrison (60), and Jones (76) favoring rationalizing influence channels, and with Hereford's finding (62) that formalized parents and teachers groups are perhaps most fruitful.

Local Pressures

Gross (55) reported evidence of heavy, nearly unbearable pressures on Massachusetts school superintendents; he outlined the pressure-agents that were recognized, their relative frequency of action, and the substances of the pressures and their relative frequencies. Carter (21) found California school superintendents often insensitive to newspapers as clues to local pressures and favorably responsive to newspapers as either direct or indirect pressure agents. However, Van Fossen (121) demonstrated that newspapers provide valuable clues and are powerful, sometimes unfavorable, pressures on superintendents. Schiff (111) analyzed the origins and outcomes of teacher strikes after World War II and found these teacher-group pressures constructive. Skaife (112) analyzed the sources, interrelations, practices, and past and probable future consequences of organized, negativistic pressure groups having local as well as national outlets in the United States; his evidence of "interlocking directorates" was provocative. Conrad (25) and Tilden (118) studied administrative response to forces in a California community and found the response generally tended toward strategic centralization of control and coordination of communication. Fretwell (48) classified the forces for establishing local public junior colleges in five states into four types: a community pressure group for junior-college instruction, an individual person or a group as the prime mover, ensuing community pressure, and administrative pressure relative to technical problems.

Often overlooked because they are unrationalized are the more diffuse or informal pressures of a community on the school. Callaway's study (18) of environmental and community influences bearing on teachers and administrators was one of several illuminating research projects. Johnson (73), in an opinion study, found local public pressures on public schools to be functions of the power structure, common and separate group values, channels to national sources, personality disturbances, and undisciplined attitudes toward facts.

Darling (30) fictionalized adequate technics for dealing with attacks on the schools. Hamlin (58) sought to state ways for converting pressures on the schools into rational citizen-participation in school control. Haring (59) developed from conferences of selected lay and professional people a set of principles of community-school relations for superintendents.

Characteristics of Formal Agents of School Control

Charters (22) analyzed assumptions, technics, and findings of current research on schoolboard personnel, social class analysis, and the control of education, arriving at a promising model for needed research. Gross (54) indicated common reasoning errors, the multiplicity of definitions of social class, and other methodological flaws in research into social strata and education, using selected studies as cases.

Brown's data (12, 13) generally substantiated Counts' 1926 study, indicating particular trends but no harm from membership bias. Eberhart (36) concluded from a study of Pennsylvania small district boards that members' socio-psychological characteristics had changed little in the past 30 years. The range of differences in the composition of boards of control in the United States was spanned by Brubaker's study (14) of Indiana board members, by Levitats' study (81) of boards of Jewish schools, and by Rand's study (108) of boards of Negro private colleges.

Stapley (116) used Flanagan's critical incident technic to study board members; he found the "effective" member usually to be under 60 years of age, much schooled, a parent of a school child, in a profession or business, of more than a year's service, of either sex, a team member, active in the community, and a person valuing facts, initiative, and informed leadership. Barnhart (4), also using this technic, came to similar conclusions. Whalen (124) found Midwestern board members more adequate if appointed by a formal civil agent than if elected. McGhehey (84) found high-ranking boards to be distinguished from low-ranking boards by: high community prestige of membership; community organized caucuses for nomination; nonpartisan procedures in selecting members and school workers; selection to represent religions, nationalities, and residential areas; and great member interest or participation in professional educational affairs. Smith (113) discerned sharp discrepancies between the legally and the operationally defined roles of one-teacher-school trustees in California. Johnston (75) characterized independent school district board members in Oklahoma as primarily farmers, high-school graduates, and as having about seven years' service. He found no relation between such characteristics and the extent to which board members agreed with selected educational principles in four areas; over three-fourths of the members agreed with all the principles. Chubbuck (23) studied the tensions between local schoolboards and boards of finance in Connecticut. Condit (24) found that Missouri board presidents agreed more with cited opinions of educational specialists than with board practices. County schoolboards failed to assume statutory responsibilities and were influenced in appointments of superintendents by partisan politics, according to Pound (104). McLaughlin (86) argued that public schools are controlled by the public and not by "professionals."

Attitudes Toward the School

Studies of attitudes toward schools have increased from perhaps half a dozen good ones from 1930 to 1950 to several dozen of variable quality in the past three years. Attitudes of different groups and factors influencing attitudes have been identified. Role studies have increased. Parent, pupil, teacher, and nonparent responses are usually highly favorable to today's schools, even complacently so. Reported data indicate few "average" teachers, schools, or practices. However, differences do exist at the high end of the scale. There have been inconsistencies between specific and general reactions.

The *Illinois Opinion Inventories* were used descriptively several times (5, 35, 67, 96). Finlay (43) used the inventories to compare pupil and parent opinion and to assess the influence of several variables upon the opinions of each. James (68) selected 28 questions to query seven "publics" for data basic to a public relations program in Concordia, Kansas. Gillett (52) gathered data from Eugene, Oregon, citizens, pupils, and teachers to prepare for best use of a new high school. The Denver school system (34) repeated its 1950 study and found a favorable shift in attitudes.

Williams (125) made four case studies of school-community interactions and developed parent and teacher questionnaires for the Florida Leadership Study. Henderson (61) used Williams' instruments to demonstrate that relatively democratic principals secured more favorable attitudes from parents toward schools but not from teachers toward the community. Five studies dealing with the same county described the role of the teacher (19), the schoolboard (64), the school (74), the principal (85), and the superintendent (114). The Michigan Communications Study issued two reports by Haak (56, 57) on the development of instruments to measure present information and opinions toward schools. Several related projects were reported in the *Third Annual Report* (100) of the Ohio State University CPEA project.

Results of statewide opinion studies in Kansas (1), Michigan (28), and Kentucky (77) were reported. Three Purdue Opinion Panels (105, 106, 107) surveyed attitudes of high-school youth on a nationwide basis. Brinegar (9) probed student opinion in Indiana in seven areas and found favorable attitudes in two-thirds to five-sixths of the respondents. A Nova Scotia survey (99) of attitudes toward teachers, finance and administration, facilities, program, and teacher-parent-pupil relationships provided data for interesting comparisons with studies in this country.

Buffington (17) employed the critical incident technic with parents to sketch desired roles of elementary-school principals. Using opinions of parents and teachers, Maloney (89) completed a role study of the task of the elementary school, and analyzed his data for factors which influenced expectations. Gans (49) made a synthesis of studies on the cultural and situational genesis of public attitudes and pressures affecting ele-

mentary schools. Paine (102) categorized and analyzed opinions of students, and parents and other adults about California junior colleges.

Cousino (27), in a careful piece of research, compared lay opinions with those of experts on issues in the secondary-school curriculum. Lee (80) gave a concise history of public opinion and school attitude research and compared positions of patrons and nonpatrons on 10 school issues. Richardson (109) revealed considerable similarity of opinions between satisfied parents and professionally active teachers with respect to growth, motivation, and personality, but differences with respect to standards, teaching methods, marking practices, grades, and homework. Gardner (50) reported substantial agreement with an understanding of educational policies by Kansas City, Missouri, lay leaders. Sommer (115) analyzed organized farm-group attitudes toward and their influence on education in Michigan.

Bretsch (8) described what citizens felt about a citizen study of their schools, and Norman (97) studied reactions of citizens to public-school programs. Dennis (33) used an attitude survey to improve a public relations program. Jaynes (69) described conceptions of permissible social roles for teachers. Dalby (29) found parents generally satisfied with existing conditions in the schools. Anderson (2) investigated parental attitudes toward the prestige, suitability, and desirability of teaching occupations for sons and daughters, and related these to grade level of the occupation and social class membership of the respondent. Davie (31) confirmed that social stratification influenced the type of school which pupils attended, length of attendance, type of program, as well as parental value expectations for their children.

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CHAPTER VI

The Wider Social Context of Education

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DURING the period covered by this REVIEW there has been an increase in the number of careful studies that relate social forces to school life. Many of these were conducted by educators and appeared in the literature of professional education. As has been true in the past, studies of economic and social forces made during this period have added to our understanding of the wider social context of education. Data on technological and economic changes, population changes, and the types of social stratification found in the United States provide important leads to both the guidance and the curriculum worker. Studies that provide such data and studies that attempt to relate social forces to education have been reviewed in this chapter.

Technological Change

The educational problems posed by technological development in industrialized nations were spelled out in the report of a UNESCO Conference (57). The report recommended: (a) more foresighted plans for technical education, (b) measures to set up adequate technical schools, and (c) more "know-how" in general education. A report by Staley and others (51) considered forces in present society that make for mechanization and their relation to human values. Mass education was regarded as one of these forces. Dahl (11) edited a survey of the impact of atomic energy. Several of these articles discussed problems of concern to school people, including the type of education needed to foster human values under tensions of maintaining political peace.

Mead (36) viewed technological change as a part of human choice and effort, making a new kind of human being. She expressed the need for new kinds of education which would help children to live with change acceptingly and naturally. Menninger (37) identified some of the undesirable psychological results of industrial work and recommended countermeasures.

The National Economy

Mills (38) documented the shift of the United States economy away from individual enterprise toward impersonalization, the increase of control thru manipulation, the loss of values and self-confidence, and the development of political apathy. The study touched intermittently on the relation of these trends to education. Woytinsky and others (65) compiled an exhaustive analysis of employment and wages in the United States.

Resources for educators concerned with gearing the school program to economic realities may be found especially in Part Two, "The Institutional Setting"; Part Four, "Wages and Earnings"; and the concluding chapter. The new labor-management situation calls for new behavior patterns and tactical methods, increasing the importance of economic philosophy and recent economic history. Galbraith (17) and Hoover (24) clarified and offered ideas for resolving the *laissez-faire* vs. welfare-state conflict which underlies educators' efforts to orient the curriculum to the economic scene.

Educational inequalities resulting from economic differences among states have lessened, according to a report by the U. S. Office of Education (59). For 1949-50 a ratio of more than five to one for median expenditures per classroom unit was found between the high and the low states (New York and Mississippi), in comparison with a nine-to-one ratio in 1939-40. Thirty-nine states raised the levels of low-expenditure classrooms in relation to state medians. During the 10 years, dollar expenditures per classroom unit increased more than the cost-of-living index. However, personal incomes (after deducting federal income tax) increased even more. Only 13 states spent more in proportion to income per classroom unit than in 1939-40. Of these 13 states, nine were in the South.

Occupations

Several studies of occupations should offer help to guidance and curriculum workers. Clark (10) and the National Manpower Council (41) explored the recruitment of manpower for national security needs with emphasis upon the college-trained group and the identification of persistent policy problems to be solved. Jaffe and Stewart (28) analyzed the working force of the United States with respect to composition, characteristics, and occupational trends. Breckinridge (5) studied the problems of aging workers, their difficulties in finding needed re-employment, and programs of companies working to achieve more flexible policies.

Hughes (25) edited an issue of the *American Journal of Sociology* devoted to the sociology of work. This issue reported seven studies of white- and blue-collar workers: their work history, their chances for occupational mobility, their ideals, and their achievement. Ginzberg and others (18) studied the determinants of occupational choice for subjects aged eight years thru young adulthood. Three basic characteristics of occupational choice were found: (a) it is a developmental process, (b) the process is largely irreversible, and (c) it consistently involves compromise.

Population Change

The continuing upsurge in population has posed progressively acute problems for the schools. Population studies of the last three years were concerned with changes in age composition, high rates of internal migration, and the need for revision of public policy to meet these changes. Landis'

advanced textbook (30) contains extensive bibliographies and supplements the limited sampling of studies reported below.

Davis (12) continued to emphasize the startling implications of the "population explosion." He stressed the need for revising forecasting procedures and for sharply modifying obsolete notions of population trends. He examined implications of changing age ratios for economic cycles, use of natural resources, employment, and social institutions.

Burgess (7) summarized the types of data and services available to research workers thru the U. S. Bureau of the Census. Explanations and examples showed ways in which census reports can be studied to provide information about comparative group status, group characteristics, and population trends. He suggested that the usefulness of the census data depended upon the manner in which research workers in the social sciences weigh and interpret the facts in relation to current issues. Data from the 1950 enumeration can help educational workers on school problems ranging from the neighborhood to the national level. The special report on education (58) should be exceptionally valuable. An issue of the *Journal of Negro Education* edited by Thompson (53) gave a striking example of the intensive use of census data by a group of research workers. This issue included 16 papers covering various aspects of the Negro population of the United States, long range trends in each area, and implications for further efforts to improve the relative position of Negroes.

The Research Division of the National Education Association (40) re-studied the results of the continuing high birth rate and revised projected school enrolments for kindergarten thru twelfth grade. White (63) made a careful study of potential college enrolment in seven Ohio counties in the northern industrialized area. He found that the number seeking college entrance in 1965 may triple the number enrolled in 1952.

Hertzler (23) reported data showing an increase in replacement ratios among the better educated and higher occupational groups. The increase, percentagewise, has been almost four times as great among the college-trained population as among least favored groups. Lee and Lee (31) found Negro and white fertility differential patterns very similar for comparable educational and economic levels. The difference was least in areas in which Negroes most freely shared in the general culture.

An issue of the *Annals of the American Academy of Political and Social Science* edited by Tibbits (54) was devoted to assessing the status of the aging and the prospects for improving their integration into the national social and economic life. It was pointed out above that Breckinridge (5) studied the same group's occupational problems.

Pihlblad and Gregory (44) found test intelligence a selective factor in the migration of Missouri high-school graduates. Mean test scores tended to increase with the size of the community receiving the migration and with distance the subjects moved, working to the advantage of urban centers. Three-fifths of the subjects studied had moved from the county in which they attended high school. The U. S. Office of Education (61)

reported the efforts being made to solve the educational problems associated with the children of migrant farm workers and made clear the need for much more comprehensive study of the problem.

Urban-Suburban-Rural Factors

Many studies showed the need to shift the "rural-urban" conceptual dichotomy in the direction of a continuum of life patterns with distinctive emphases. Students of education and of sociology noted the effects of urban influences on rural life and the surge of urban people to the suburbs and open country "fringe areas." Two journals, *Rural Sociology* and *American Sociological Review*, consistently reported the interpenetration of rural and urban life styles and the emerging patterns of "fringe-area" living. The article by Gist (19) considered such decentralization and interpenetration. Hunter (26) described procedures for decision making in the urban community. Dillick (13) traced the history of efforts to strengthen urban neighborhood life thru community councils.

Little was reported by professional educators on the role of education in the suburban areas. However, Robinson (46) outlined characteristics of suburban families and the attendant educational problems that merit intensive research effort. The notion that distinctive cultural patterns may be emerging where rural and urban life styles meet was examined by Jaco and Belknap (27) and by Lively and others (33). These studies suggest important implications for education, including the need to clarify the role of the school. Lively and others (33) explored the rural-urban "fringe" concept in an attempt to formulate a useful theoretical approach for further research.

Scaff (47) compared characteristics and extent of participation in community organizations for families of commuters and noncommuters in a California suburban community. Commuters showed significantly lower social participation which was split between place of work and community of residence. The evidence suggests that the growth of suburban areas coupled with the split community identification of the population poses problems of local leadership, support for schools, and services essential to community integration.

Butterworth and Dawson (8) explored the relationship between rural sociological factors and school programs. A significant effort was made to bring the contributions of sociologists and educators to bear on the problems of education in fast changing rural areas both in this book and in the yearbook on rural education of the National Society for the Study of Education (42). The contributors to this yearbook assessed sociological factors of rural life and described major blocks to more effective rural education. Case studies of effective programs were included, along with an extensive annotated bibliography on rural life and education. Sewell and Ellenbogen (48) found that equivalent status groups in the urban, rural nonfarm, and farm groups showed little variation in measured intel-

ligence. Smitter (50) reported a statewide study of the needs and interests of California eighth-grade farm children, revealing important consequences of the spread of industrialized agriculture and urban influence. Anderson (1) reported attitude studies of high-school youth, both rural and urban, toward rural living. All groups showed stronger preference for rural living altho the more rural the group, the stronger was the preference. Sewell and others (49) found seven factors related to attitudes toward high-school education among rural families in Wisconsin. Greatest differences in attitudes corresponded to ethnic grouping, socio-economic level, and educational level.

Social Stratification

Two periodicals devoted special issues to problems of social class and education. Rath (45) edited an issue of the *Journal of Educational Sociology* on social class in relation to teacher training. O'Neill (43) edited two issues of the *Harvard Educational Review* devoted to considering social class structure in relation to education. These issues summarized current findings and concepts, and were the most comprehensive and pointed resource on the subject found for the period under review. Gross (21) provided a careful critique of the several articles appearing in these two issues.

Mills (38) identified the three broad strata composing modern society as the "old middle class," the "new middle class," and "wage-workers," differentiating them primarily by occupational criteria. However, in describing class patterns in small cities he used a descriptive framework and terminology similar to that used by many educational workers who emphasize the status dimension of stratification. The study points up a problem needing further attention: it is necessary to clear up the conceptual meaning of "class" for education by (a) clarifying the different dimensions of stratification (economic, prestige, power) in relation to cultural patterns, and (b) clarifying the difference in the meaning of stratification as a community phenomenon in contrast to its meaning as a national phenomenon. Lenn (32) pointed out that social-class investigations of the last 25 years do not answer questions of school policy regarding social class.

White (63), in a carefully designed study, found that "a great reservoir" of high ability lower-class students do not go to college. Financial aid resulted in increasing the number of lower-class college students, but not proportionally. This raises the question of motivation for attending college.

Woytinsky and others (65) found that since 1900 four kinds of differentials in earnings have been generally reduced: (a) among geographic regions; (b) between high- and low-wage pursuits, particularly between urban and rural and between manual and white-collar workers; (c) between skilled and unskilled labor; and (d) among races.

Kahl (29) reported college aspirations among high-school boys of high intelligence and lower-middle status as judged by fathers' occupations.

Approximately half of the lower-middle status boys in the top fifth with respect to IQ aimed at college and half did not. From interviews, Kahl concluded that the chief differentiating factor was parental ambitions for the sons which were internalized by the boys. Educators have been particularly concerned with the problem of making the schools more effective in reaching lower-class children. Mills' (38) work on the middle classes spelled out difficulties which educators face in helping the latter group.

Additional evidence was provided concerning whether vertical mobility in the United States is increasing or decreasing. Hertzler (23) concluded that both mobility drive and means of satisfying it are decreasing. Mills (38) indicated a diminishing role for the high school in providing upward status mobility. Without exploring in any detail what the school's new role might or should be, he noted explicit vocational emphasis, lessened faith in equal educational opportunity, and a tendency to manage the education-occupation structure thru the use of tests and measurements to sort out the young. Mulligan (39) concluded that opportunities for social mobility thru higher education are limited and can be increased only thru a program of national scholarships. The consistent evidence of decreasing mobility in the studies just cited needs to be weighed against the evidence of decreased income differentials and decreased differentials in school expenditures.

Charters (9) reviewed the evidence pointing to control of the schools in the interests of dominant social classes and questioned the commonly accepted conclusion of class bias. He specified the need for more rigorous research on other aspects of the problem than those emphasized heretofore.

Interpretations and criticisms of the Chicago studies of intelligence and cultural differences (15) were conflicting. Eells (14) discussed the significance of efforts to construct tests of basic problem-solving ability. Both he and Stenquist (52) expressed the need for reorienting the school program. Lorge (34) criticized the statistical procedures of the original study and recommended other treatments of the data. Tyler (56) concluded that the test analysis did not prove cultural bias and that an experimental approach was necessary. Gross (21) judged that "intelligence" as defined by Eells and others would be impossible to measure.

Intercultural Relationships

Trager and Radke-Yarrow (55) studied racial and religious attitudes in 250 kindergarten, and first-, and second-grade children thru projective and interview methods. They showed relations of prejudice to age, to specific personality needs, and to informal example and teaching by parents. An extremely penetrating study was reported by Goodman (20). She studied four-year-olds by observation, interviews, tests (including projective techniques), and school records. The details of the study convey a depth and real-life impact rare in research reports. She found a high degree of race

awareness among the children, and in Negro children found the beginnings of uneasiness, insecurity, and ambivalence.

Forster and Epstein (16) reported activities of individuals and groups in fomenting prejudice against minorities. Schools were considered only in relation to agitation against federal aid to education. Berger (4) described the tendency to use laws to lessen discrimination and improve group relations. He concluded that law is formidably effective in lessening discrimination, both by reflecting the mores and influencing them.

Handlin (22) concluded that, since World War II, barriers among ethnic and racial groups have lessened. The study provided material valuable to educators in assessing the setting in which the school works and the positive forces to which it may contribute, but for some reason gave almost no attention to the schools as a factor in acculturation. Lundberg and Dickson (35), in a sociometric study of two large high schools, reported strong cleavages among ethnic groups. Ethnocentrism was directed to specific groups in specific work or friendship contexts, rather than appearing as prejudice in general. Broom and Shevky (6) identified factors which have retarded the acculturation of Mexicans in the United States.

Negro Status and Education

Space limitations of the present chapter preclude any attempt to deal adequately with the mass of literature on interracial relationships and Negro status and education. Among periodicals, the *Journal of Negro Education* in particular has included many significant studies. Others were reviewed recently in the REVIEW (62, 64).

Present racial discrimination takes on greater meaning when viewed in relation to the long history of discrimination and the progress that has been made, especially since about 1900. Aptheker (2) provided a basis for such perspective; he assembled documentary materials dating from colonial times, connected by editorial comment. Twenty of the selections deal with education. Ashmore (3) produced a masterly report of research by a team of 45 scholars on bi-racial education in the United States. The report summarizes, documents, and interprets the history and present status of segregated education in both the North and South and the results of recent steps toward integration.

A report issued by the U. S. Office of Education (60) showed that severe inequalities between white and Negro education still existed in 1949-50 in most of the Southern states, but that during the 10 years since 1939-40 all had notably increased the proportion of funds used for Negroes. However, in eight of the states, the increase in dollars per classroom unit was greater for whites than for Negroes. Handlin (22) concluded that the years since World War II had decreased demagogic attacks on minorities and brought the doctrines of racism to an end. The latter part of this conclusion is in striking contrast to the findings of Forster and Epstein (16).

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Index to Volume XXV, No. 1

Page citations are made to single pages; these are often the beginning of a chapter, section or running discussion dealing with the topic.

- Adjustment, 31
- Attitudes, as affected by education, 28
- Attitudes toward education, 53
- Behavioral sciences, philosophy of, 13
- Boards of education, characteristics of, 52
- Camping, 41
- Comic books, effects on children, 39
- Community forces affecting education, 48
- Criticisms of education, 8
- Delinquency, 32
- Educators, role in community leadership, 48
- Family life, 43
- Forces affecting education, 49
- History of education, 5
- Income, in relation to education, 27
- Influence channels, 49
- Intercultural relationships, 66
- Job satisfaction, 26
- Language of science, 13
- Leadership in the community, 48
- Logical positivism, 15
- Metaphysics of science, 16
- Mobility in relation to education, 27
- Modern education, criticisms of, 8
- Moving pictures, effects on children, 39
- National economy, 61
- Negro education, 67
- Newspapers, effect on youth, 40
- Occupational adjustment, as affected by education, 26
- Occupational trends, 62
- Operationism, 14
- Opinions about education, 53
- Personal adjustment, 31
- Philosophy of behavioral sciences, 13
- Philosophy of education, 5
- Population trends, 62
- Power structure in the community, 48
- Pressures on education, local, 51
- Psychological theory, 17
- Radio, effects on children, 36
- Recreation, 41
- Religion, 7
- Religious education, 7
- Rural education, 64
- Scientific empiricism, 14
- Scientific method, 18
- Social adjustment, 31
- Social context of education, 61
- Social dividends of education, 25
- Social influences on children, 36; needed research, 44
- Social stratification, 65
- Technological change, 61
- Television, effects on children, 36
- Theories of learning, 18
- Thinking ability, as affected by education, 31
- Values of education, 25
- Work experience, effects on youth, 42
- Youth-serving organizations, 40